

REMARKS

Reconsideration of the above-identified application is respectfully requested.

As a preliminary matter, in the current Office Action, made Final, the Examiner rejected claim 52 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In response, the applicants amend Claim 52 to provide proper antecedent basis for a rejected term.

Further in the Office Action, the Examiner had rejected pending Claims 34-52 under 35 U.S.C. §103(a) as being unpatentable over Imaizumi et al. (U.S. Patent No. 6,293,911) in view of Hynecek (U.S. Patent No. 5,337,340) and further rejected Claims 34-38 and 41 under 35 U.S.C. §103(a) as being unpatentable over Palcic et al. (U.S. Patent No. 5,827,190) in view of Hynecek. Claims 34-36 and 41 further stand rejected under 35 U.S.C. §103(a) as being unpatentable over Sekiguchi (U.S. Patent No. 4,821,117) in view Hynecek.

With respect to the Examiner's first rejection of Claims 34-52 as being unpatentable over Imaizumi in view of Hynecek, Imaizumi, while being filed November 19, 1997, qualifies as prior art under United States Code 35 U.S.C. §102(e)/103. As such, it is noted that Imaizumi may not be prior art as to the present application because Imaizumi and the present application have been assigned to the same corporation, Olympus Optical Co., Ltd.

That is, the cited reference to Imaizumi, while being filed November 19, 1997 qualifies this reference as prior art under 35 U.S.C. §102(e). However, Applicants note that Imaizumi is not prior art as to the present application because Imaizumi and the present application are assigned to the same corporation, Olympus Optical Co., Ltd. Applicants

submit that the American Inventors Protection Act of 1999, enacted November 29, 1999, had amended 35 U.S.C. §103(c) to recite essentially that subject matter developed by another person which qualifies as prior art under 35 U.S.C. §102(e) does not preclude patentability where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an application of assignment to the same person.

That 35 U.S.C. §102(e)/ 103(c) applies to the instant application is established by the fact that Imaizumi was filed November 19, 1997 and pending on or filed after November 29, 2000.

That the claims of the present application are patentable over the rejection of record is established by the fact that Imaizumi is, on its face, assigned to Olympus Optical Co., Ltd.. The present application when it was filed January 17, 2001, was also assigned to Olympus Optical Co., Ltd., as evidenced by the Assignment recorded by the USPTO on January 17, 2001 at Reel 011586, Frame 0047 (ownership of the present application has since been assigned to Olympus Corporation as evidenced by the Assignment recorded by the USPTO on January 20, 2004 at Reel 014909, Frame 0490).

U.S. Patent 6,293,911 to Imaizumi issued September 25, 2001. The present application is entitled to the benefit of the filing date of January 17, 2001. As such, the outstanding rejection of the claims of the present application applies the Imaizumi patent predicated upon its availability as a reference under 35 U.S.C. §102(e) in that this is the only subsection of 35 U.S.C. §102 whose requirements are met by this patent. In view of the requirements of 35 U.S.C. §103(c), as amended November 29, 1999, which apply to the instant application, the principal Imaizumi reference cannot preclude patentability under 35 U.S.C. §103, the section upon which the claims of the present application have been rejected. Thus, the Claims 34-52 of the present application are patentable over the outstanding rejection

of record. Reconsideration and removal of this ground of rejection is therefore deemed appropriate. Such action is respectfully urged.

With respect to the rejection of Claims 34-38 and 41 as being unpatentable over Palcic in view of Hyncek, applicant respectfully disagree in view of the amendments made to Claims 34 and 41 and the remarks herein.

Particularly, Claim 39 is being canceled herein and the subject matter of Claim 39 is being incorporated in amended Claim 34 herein. Thus, according to one aspect of the present invention, as now set forth in amended independent Claim 34, an endoscope system comprises:

an endoscope provided with a solid-state imaging device having therein an electron multiplication mechanism to vary an electron multiplication rate and change a sensitivity of the solid-state imaging device based on sensitivity control pulses supplied;

a signal processing unit for processing a signal output from the solid-state imaging device;

a light source unit for irradiating an object;

a sensitivity control unit for controlling a sensitivity by controlling the number or amplitude of the sensitivity control pulses to vary the electron multiplication rate, the sensitivity control unit controlling the number of the sensitivity control pulses or amplitude of the sensitivity control pulses so that a level of a signal from the solid-state imaging device may be of a predetermined value; and

an automatic-gain control circuit adapted for supplementarily amplifying a signal output from the solid state imaging device of which the sensitivity has been controlled so that the level of the signal becomes a predetermined level if it is lower than the predetermined level.

Care has been taken to ensure that no new matter is being entered in new Claim 34 (and in amended Claim 41) as support for an automatic-gain control circuit adapted for supplementarily amplifying a signal output from the solid state imaging device of which the sensitivity has been controlled so that the level of the signal becomes a predetermined level if it is lower than the predetermined level may be found in the specification, for example, in the paragraph bridging pages 54 and 55, and in the first full paragraph on page 58 of the specification in support of Figures 17-23 of the present application.

It is respectfully submitted that neither the Palcic nor Hyncek whether taken alone or in combination, teaches an endoscope system as claimed in amended Claims 34 and 41 having an automatic-gain control circuit adapted for supplementarily amplifying a signal from the solid-state imaging device of which the sensitivity has been controlled so that the level of the signal may become a predetermined value if it is lower than the predetermined level.

Applicants respectfully submit that the distinctive differences between the present invention and the cited references, whether taken alone or in combination, includes:

(1) that the sensitivity control unit (as set forth in amended Claims 34 and 47) or sensitivity control means (as claimed in amended Claims 41 and 52) amplifies the output signal so that the level of the output of CCD may become a predetermined value; and,

(2) the provision of an AGC amplifier circuit (means) for supplementarily amplifying the output signal of CCD if the output of CCD amplified by the sensitivity control means is less than a predetermined level (i.e., amended Claims 34, 41, 47 and 52).

That is, there is no teaching or suggestion of an endoscope device having the constitution of both sensitivity control means and AGC providing further amplification of the output of CCD (control by the sensitivity control means) to a predetermined level.

Hence, it is respectfully submitted that it is not obvious for a person skilled in the art in view of the cited Palcic/Hynecek references or Sekiguchi/Hynecek references (applied in combination against claims 34-36 and 41) to have an AGC circuit supplementarily amplify in case the output signal of CCD amplified by the sensitivity control means (unit) is less than a predetermined value.

In view of the foregoing, it is respectfully submitted that the amended independent Claims 34, 41, 47 and 52 setting forth an auto-gain control circuit for supplementarily amplifying a signal from the solid-state imaging device such that the output value (level of the output value) of CCD may become a predetermined value with respect to the sensitivity control unit output level is neither taught nor suggested by the combination of prior art documents in the manner as applied by the Examiner in the Office Action, and consequently, are patentable thereover.

Consequently, it is submitted that Claims 34, 41, 47 and 52 of the present application, and claims dependent thereon, are patentable over the outstanding rejections of record. Reconsideration and removal of these grounds of rejection are therefore deemed appropriate and the Examiner is respectfully requested to perform the same.

In view of the foregoing remarks herein, it is respectfully submitted that this application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance be issued. If the Examiner believes that a telephone conference with the Applicants' attorneys would be advantageous to the disposition

of this case, the Examiner is requested to telephone the undersigned, Applicants' attorney, at the following telephone number: (516) 742-4343.

Respectfully submitted,



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